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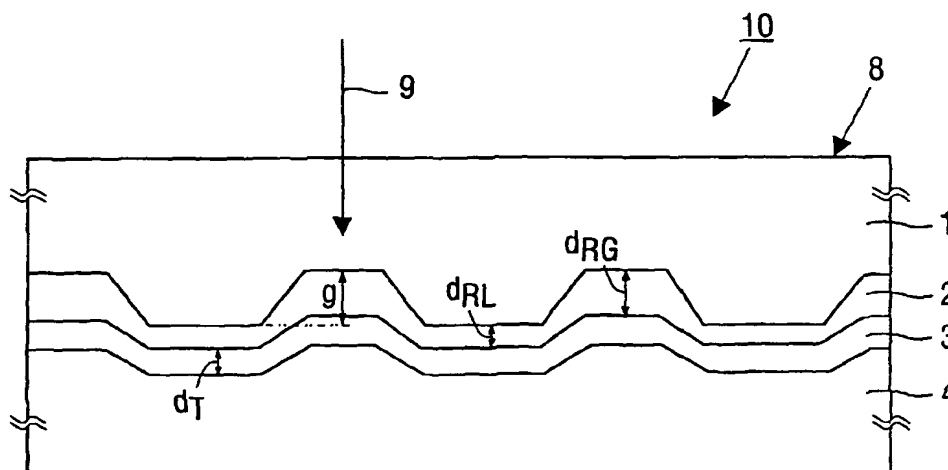
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[Continued on next page]

(54) Title: **OPTICAL DATA STORAGE MEDIUM AND USE OF SUCH MEDIUM**



(57) Abstract: An optical data storage medium (10) for recording by means of a focused radiation beam (9) having a wavelength λ is described. The beam enters through an entrance face (8) of the medium during recording. The medium at least comprises a substrate (1), including a guide groove with a depth g . The guide groove is present at the side of the substrate opposite to the entrance face. A recording stack (2, 3) of layers is present adjacent the substrate (1) at the side of the guide groove. The stack includes a write-once recording layer (2) of a material having a complex refractive index $\bar{n}_R = n_R - i \cdot k_R$ at the wavelength λ and having a thickness d_{RG} in the groove portion and a thickness d_{RL} in the portion between grooves. A non-metallic layer (3) of a substantially transparent material, is present adjacent the write-once recording layer (2). The groove depth g is in the range $(\lambda/655) \cdot 20 \text{ nm} < g < (\lambda/655) \cdot 140 \text{ nm}$ with λ expressed in nm. This range achieves a sufficient push-pull tracking signal and a sufficient modulation of recorded marks.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Int. Patent Application No

PCT/JP03/01377

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G11B7/007 G11B7/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	EP 1 174 869 A (FUJI PHOTO FILM CO LTD) 23 January 2002 (2002-01-23) paragraphs '0001!-'0012!, '0051!, '0061!-'0063!; figures 1-3	1-10
X	US 2001/016242 A1 (ANDOO KEIKICHI ET AL) 23 August 2001 (2001-08-23)	1-5, 9, 10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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